## designsafe Report

Application: Pusher Syndrome Assist Device Analyst Name(s): Jake Hoyne, David Glaubke, Pat Naureckas

Description: A device used to assist with the rehabilitation of Pusher Company:

Syndrome Patients. The product consists of a smartphone application along with a 3D-printed phone caddy and

attachment harness.

Product Identifier: Facility Location:

Assessment Type: Detailed

Limits:

Sources:

Risk Scoring System: ANSI B11.0 (TR3) Two Factor

Guide sentence: When doing [task], the [user] could be injured by the [hazard] due to the [failure mode].

Item Id	User / Task	Hazard / Failure Mode	Initial Assessm Severity Probability	nent Risk Level	Risk Reduction Methods /Comments	Final Assessme Severity Probability	ent Risk Level	Status / Responsible /Reference
1-1-1	Patient normal operation	material handling : excessive weight Weight exceeds ergonomic comfort for long periods of wear	Minor Unlikely	Negligible	Eliminate by design	Minor Remote	Negligible	Complete [12/3/2013] All group members
1-1-2	Patient normal operation	Other: None / Other Improper sanitation with repeated use	Minor Unlikely	Negligible	Procedural cleaning/santitation before/after use	Minor Remote	Negligible	In-process All group members
1-2-1	Patient basic trouble shooting / problem solving	mechanical : pinch point Skin trapped between velcro or adjustable straps	Minor Unlikely	Negligible	standard procedures	Minor Remote	Negligible	In-process All group members
1-3-1	Patient Place phone in/out of caddy	mechanical : cutting / severing Skin could be cut on edges of phone caddy	Moderate Unlikely	Low	Eliminate by design	Moderate Remote	Negligible	Complete [12/3/2013] All group members
1-3-2	Patient Place phone in/out of caddy	mechanical : pinch point Skin trapped between velcro strap	Minor Unlikely	Negligible	standard procedures	Minor Remote	Negligible	In-process All group members
1-4-1	Patient Put on and take off harness	mechanical : pinch point Skin trapped between velcro or adjustable straps	Minor Unlikely	Negligible	standard procedures	Minor Remote	Negligible	In-process All group members

Item Id	User / Task	Hazard / Failure Mode	Initial Assessme Severity Probability	ent Risk Level	Risk Reduction Methods /Comments	Final Assessme Severity Probability	nt Risk Level	Status / Responsible /Reference
1-4-2	Patient Put on and take off harness	ergonomics / human factors : lifting / bending / twisting Patient injures themselves putting on or taking off the harness due to ergonomic issues	Moderate Unlikely	Low	Eliminate by design, standard procedures	Moderate Remote	Negligible	In-process All group members
2-1-1	Physical Therapist Place phone in/out of caddy	Other: Refer to other user / task Refer to associated risks with Patient above						
2-2-1	Physical Therapist Put on and take off harness	Other: Refer to other user / task Refer to associated risks with Patient above						
2-3-1	Physical Therapist basic trouble shooting / problem solving	Other : Refer to other user / task Refer to associated risks with Patient above						
3-1-1	passer by / non-user Common Tasks	Other : None / Other No Risk						
3-2-1	passer by / non-user walk near machinery	Other : None / Other No Risk						